## Contents Volume 41, 1987/88

The distribution, nature and origin of some red sesquioxidic materials in southeastern Queensland, Australia
S.E. Macnish (Bundaberg, Qld., Australia), A.J. Koppi, (Sydney, N.S.W., Australia), I.P. Little (St. Lucia, Qld., Australia) and B.M. Schafer (Lawes, Qld., Australia) ..... 1
Detailed characterization of quartz grains in two sandy soils, Western Australia
K. Asumadu, R.J. Gilkes (Nedlands, W.A., Australia), H.M. Churchward (Floreat Park, W.A., Australia) and T.M. Armitage (Nedlands, W.A., Australia) ..... 29
Genesis and environmental significance of a buried Middle Pleistocene soil in eastern England
R.A. Kemp (London, Great Britain) ..... 49
Effects on soils of an oak invasion of a *Calluna* heath, Denmark, I. Morphology and chemistry
K.E. Nielsen, K. Dalsgaard and P. Nørnberg (Aarhus, Denmark) ..... 79
Effects on soils of an oak invasion of a *Calluna* heath, Denmark, II. Changes in organic matter and cellulose decomposition
K.E. Nielsen, K. Dalsgaard and P. Nørnberg (Aarhus, Denmark) ..... 97
Some physical properties of Andepts from the Southern Highlands, Papua New Guinea
R.F. Allbrook (Hamilton, New Zealand) and D.J. Radcliffe (Mendi, Papua New Guinea) ..... 107
Pedogenesis of a chronosequence in the Sacramento Valley, California, U.S.A., I. Application of a soil development index
A.J. Busacca (Pullman, Wash., U.S.A.) ..... 123
Intrapedal cutans — lateral differences in their properties and their spatial clustering
J.B. Dalrymple and S.P. Theocharopoulos (Reading, Great Britain) ..... 149
Current Titles in Soil Science ..... 181
Characterization of some Andepts and andic soils in Rwanda, Central Africa
C. Mizota (Fukuoka, Japan) and J. Chapelle (Kigali, Rwanda) ..... 193
Discriminating horizons in a moder profile by field ionization mass spectrometry and pattern recognition
H.-R. Schulten (Wiesbaden, F.R. Germany), R. Hempfling and W. Zech (Bayreuth, F.R. Germany) ..... 211
Ferrihydrite and allophane in four Andepts from Hawaii and implications for their classification
R.L. Parfitt, C.W. Childs and D.N. Eden (Lower Hutt, New Zealand) ..... 223
Pedogenic replacement of aluminosilicate grains by $CaCO_3$ in Ustollic Haplargids, south-central Montana, U.S.A.
M.C. Reheis (Lakewood, Colo., U.S.A.) ..... 243
Extractable organic fractions of podzolic and associated soils in the Hudson Bay–James Bay Lowlands
P.A. Schuppli (Ottawa, Ont., Canada), R. Protz (Guelph, Ont., Canada) and J.A. McKeague (Ottawa, Ont., Canada) ..... 263
Potassium-calcium exchange on inorganic clay fractions of Chilean Andepts
M. Escudey and G. Galindo (Santiago, Chile) ..... 275
Transformations géochimiques au cours de l'altération météorique d'une basanite pliocène du Massif Central français (Geochemical changes during weathering of Pliocene basanite in the French Massif Central)
J.-J Macaire (Tours, France), A. Perruchot (Orléans, France) et J. Dejou (Clermont-Ferrand, France) ..... 287

A classification of soil microfabrics
C.Y. Jim (Hong Kong) ..... 315
Equation for describing anion sorption in soils with their heterogeneous adsorbing surfaces
Z. Sokołowska, A. Patrykiejew and S. Sokołowski (Lublin, Poland) ..... 327
Morphology, fertility and classification of productive soils on serpentinized peridotite in California (U.S.A.)
E.B. Alexander (Juneau, Alaska, U.S.A.) ..... 337
Color index values to represent wetness and aeration in some Indiana soils
C.V. Evans and D.P. Franzmeier (West Lafayette, Ind., U.S.A.) ..... 353
Utilisation d'une solution de chlorure de sodium pour le remplacement de l'eau dans des échantillons d'argile lourde avant l'imprégnation (Use of sodium chloride solution to replace water specimens of heavy clay prior to resin impregnation)
M. Blackburn, M. Caillier (Québec, Qué., Canada), G.A. Bourbeau (Ottawa, Ont., Canada) and G. Richard (Québec, Qué., Canada) ..... 369
*Book Reviews*
Ando Soils in Japan, by K. Wada (Editor) — Y. Ishizuka ..... 375
Enironmental Change and Tropical Geomorphology, by I. Douglas and T. Spencer (Editors) — S.J. Riley ..... 376
Phytogeomorphology, by J.A. Howard and C.W. Mitchell — C.R. Margules ..... 377

Current Titles in Soil Science ..... 379